Mental health and climate change: tackling invisible injustice

Ingle, Harriet E.; Mikulewicz, Michael

Published in:
The Lancet Planetary Health

DOI:
10.1016/S2542-5196(20)30081-4

Publication date:
2020

Document Version
Publisher's PDF, also known as Version of record

Mental health and climate change: tackling invisible injustice

The degree of distress a person feels about climate change is often related to how directly their environment is altered or threatened.[1] In countries hit by disasters we are likely to see increases in mental distress and the ability to recover will be determined by having efforts that promote resilience. However, even in countries not yet directly affected by devastation due to climate change, there are numerous personal and clinical accounts of subclinical depressive emotions, despair, and guilt associated with the climate crisis and other global environmental issues. A key factor that contributes to climate anxiety is knowing danger is coming but not having any appropriate scripts, skills, or direct agency in place to mitigate it. So-called eco-anxiety is understood as the presence of anxiety in relation to the existential threat that the climate and ecological crises represent. Distress related to impending environmental change, such as eco-anxiety and habitual ecological worrying, is increasingly noted by mental health professionals, although there are no official statistics on how many people are affected.

Eco-anxiety is characterised by severe and debilitating worry about climate and environmental risks and can elicit dramatic reactions, such as loss of appetite, sleeplessness, and panic attacks among those affected.[2] However, far from being a contemporary mental illness, there is evidence to suggest that eco-anxiety and habitual ecological worrying are actually adaptive responses to the changing climate.[3] Anxiety is an evolutionary alarm mechanism that functions to keep us safe, in the same way that our pain receptors make us reflexively move our hands away when held over an exposed flame. If the perceived probability of danger is accurate and the anxiety is proportionate, then it is an adaptive advantage for survival. Framing of these psychological states as a condition can serve to create a so-called global victim mindset. In the last 3 years there has been an increase in media interest around eco-anxiety represents one such example, where a mostly reasonable response to this insidious humanitarian disaster is characterised as a new mental illness. Given that climate change is a serious threat to human health and wellbeing perhaps it helps to be a little worried. Although, the lack of decisive global action on the issue could imply that we are not worried enough.

However, this view disregards two important notions. First, that global society and health-care systems are not all equally equipped to deal with mental health issues related to climate change such as eco-anxiety and second, that countries are not equally responsible for the primary cause of climate change. Therefore we propose it is time to look at the mental health impacts of climate change through the analytical lens of climate justice, which foregrounds the ethical dilemmas and fundamental inequalities related to climate change, with a particular focus on the most marginalised populations, groups, and individuals.[4]

Considering mental health and climate change research reveals that not everyone reacts with motivation and decisive action when faced with eco-anxiety. For many, the ominous reality of climate change results in feelings of powerlessness to improve the situation, leaving them with an unresolved sense of loss, helplessness, and frustration.[5] For others, the anxiety they have can become debilitating. The so-called dragons of inaction (panel) often immobilise even the best intentioned individuals in the face of large-scale problems such as climate change.[6] The key question here is: who are the people least able to deal with the mental health effects of climate change?

Crucial studies on climate change impacts, despite usually not focusing on mental health, often identify communities that are more at risk of having mental health issues related to climate change. These studies suggest that vulnerability is contextual and therefore differentially distributed across and between communities and individuals.[7] Populations with pre-existing chronic health conditions, low socioeconomic status, children, older people, and some ethnic minority groups are particularly vulnerable to the health impacts of climate change and have a potentially low capacity to adapt.[8] Similarly, these populations often lack the financial, social, or community resilience needed to cope, manage, and recover from new environmental hazards or climate stress.[8] These considerations can and should be extended from a more traditional focus on physical health to mental health and wellbeing.

For more on **subclinical depressive emotions** see https://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-4940

For more **symptoms of eco-anxiety** see https://www.inquirer.com/philly/health/20070409_Eco-anxiety__Something_else_to_worry_about.html

Panel: **Psychological barriers to climate change mitigation and adaptation**[6]

Limited Cognition

Ancient brain
Our brains evolved to deal with immediate issues, not distant ones like climate change.

Ignorance
Not knowing that there is a climate problem at all or not knowing what to do about it.

Environmental numbness
Being unaware of issues that are not causing us immediate discomfort or being habituated to climate messages due to hearing them too often.

Judgemental discounting
Undervaluing distant or future risks, leading to less motivation to act on climate change now.

Optimum bias
The tendency to discount personal risks, leading to underestimates of how badly they themselves will be impacted.

Perceived behavioural control or self efficacy
Feelings of powerlessness over influencing the outcome of climate change, sometimes leading to a defeatist approach.

Ideologies

Worldviews
A belief in free-enterprise capitalism predicts disbelief in climate change.

Suprahuman powers
Belief that a religious deity, or Mother Nature as a secular deity, will either not forsake them, or will do as they please either way.

Technosalvation
A belief that technology alone can save us from climate change.

System justification
The tendency to defend and justify the status quo of society, particularly when individuals have a comfortable lifestyle which they are unwilling to compromise on.

Comparison with others

Social comparison
Taking the lead from the actions of others and determining what course of action to take on climate change.

Scoial norms and networks
Norms can be a positive force but can also be a reason to consume more. Knowing what the norm is for your social group or network tends to lead to behavioural adjustments to fit that norm.

Perceived inequality
Unwillingness to change if others are perceived as not changing.

Sunk costs

Financial investments
Once a person is invested in something, dispensing with it becomes harder than if the investment was never made (car ownership being a good example).

Behavioural momentum
Habitual behaviours are extremely resistant to permanent change and changing them often takes a long time.

Conflicting values, goals, and aspirations
Pro-environmental values can be incompatible with other personal values, goals, and aspirations. These values are in competition with each other and the pro-environmental ones do not always win.

Place attachment
People care more about places they have attachment to than places they have no attachment to. Weaker place attachment might therefore be an obstacle to pro-environmental behaviour.

Discredence

Mistrust
When inaccurate climate messages are broadcast (between citizens, their scientists, or government officials), trust is weakened. Trust is vital for changing behaviour, so behaviour change is less likely when trust is lessened.

Perceived program inadequacy
Most pro-climate policies so far involved voluntary participation (few being mandatory or resulting in sanctions), so citizens can often decide that the program is not good enough for their participation.

Denial
Active denial of the problem can occur as a result of uncertainty, mistrust, and sunk costs.

Reactance
Many individuals distrust messages that come from scientists or government officials and react strongly against advice or policies which are perceived to threaten their freedom.

Perceived risks

Functional
Uncertainty over whether the new technology being adopted will work (eg, uncertainty over the battery capacity of electric vehicles).

Physical
Concern as to whether the new green technology is as safe as the previously used modality.

Financial
Many green solutions require capital outlays, so there can be concerns over how long it takes to pay back or whether that investment will be beneficial long term.

Social
Perceived negative judgement by friends and colleagues (eg, will I be mocked for buying an electric vehicle?)

Psychological
If mocking for choices does occur, then this could harm self-esteem and confidence.

(Panel continues on next page)

(Panel continued from previous page)

Temporal
The time spent planning and adopting the new course of action might not produce the desired results.

Limited behaviour
Tokenism
Some climate behaviours are easier to adopt than others (but have little impact on greenhouse gas emissions), yet it is these easier actions that tend to be chosen over higher cost (but more effective) ones.

The rebound effect
After some mitigating effort is made, the gains tend to be diminished by subsequent actions (eg, buying a more fuel-efficient vehicle might result in driving further than they did in the less-efficient vehicle).

In many settings, particularly in low-income and middle-income countries, those least able to deal with the mental health effects of climate change are among the least responsible for causing it. Regions and populations that currently have the greatest increase in diseases attributable to temperature rise are those least responsible for the greenhouse gas emissions that are warming the planet. Climate justice highlights this double inequality of climate change, in which there is an inverse distribution between risk (or vulnerability) and responsibility.[9] Developed countries are historically responsible but face the least risk of adverse effects, whereas those countries that are least responsible have the highest threats to livelihoods, assets, and security.[9]

Moreover, there is evidence to suggest that climate change exacerbates existing severe mental health inequalities within nations. In Canada, the Inuit populations are seeing some of the most rapid changes in climate and environment in the world.[10] Historically, Inuit populations experience substantial mental health disparities compared to the non-indigenous Canadian population, as a consequence of the enduring impacts of colonisation. For example, their suicide rates are up to 11 times higher than the Canadian average.[10] Thus, it is clear that the pressure already associated with pre-existing mental health disparities will be further exacerbated by future climate and environmental changes.

Researchers and practitioners need to pay more attention to environmental impacts on individual physical and mental health. However, mental health disorders caused by climate change are less visible than physical ones, particularly in developing countries where mental health sits relatively low on the agendas of governments, aid agencies, and NGOs. Therefore, the task that lies ahead is to make eco-anxiety and other mental health issues related to climate change more visible among scholars and practitioners. This awareness will benefit those most vulnerable to and least responsible for causing the global climate emergency.

We declare no competing interests.

We thank Dr Kaaren Knight and Dr Khadi Rouf for contributing to this Comment.

*Harriet E Ingle, Michael Mikulewicz
harriet.ingle@gcu.ac.uk

The Centre for Climate Justice, Glasgow Caledonian University, Glasgow, UK

1 Coyle KJ, van Susteren L. The psychological effects of global warming on the United States: and why the US mental health care system is not adequately prepared. February 2012. https://nwf.org/~/media/PDFs/Global-Warming/Reports/Psych_effects_Climate_Change_Ex_Sum_3_23.ashxncbi (accessed Feb 14, 2020).

2 Rabinowitz PM, Poljak A. Host-environment medicine: a primary care model for the age of genomics. *J Gen Intern Med* 2003; **18:** 222–27.

3 Verplanken B, Roy D. My worries are rational, climate change is not: habitual ecological worrying is an adaptive response. *PLoS One* 2013; **8:** e74708.

4 Jafry T. Routledge handbook of climate justice. New York: Routledge, 2019.

5 Moser SC. Navigating the political and emotional terrain of adaptation: community engagement when climate change comes home. In: Moser SC, Boykoff MT, eds. Successful adaptation to climate change: linking science and policy in a rapidly changing world. New York: Routledge, 2013: 289–305.

6 Gifford R. The dragons of inaction: psychological barriers that limit climate change mitigation and adaptation. *Am Psychol* 2011; **66:** 290–302.

7 Mikulewicz M. Politicising vulnerability and adaptation: on the need to democratise local responses to climate impacts in developing countries. *Clim Dev* 2018; **10:** 18–34.

8 Kreslake JM, Price KM, Sarfaty M. Developing effective communication materials on the health effects of climate change for vulnerable groups: a mixed methods study. *BMC Public Health* 2016; **16:** 946.

9 Barrett S. Local level climate justice? Adaptation finance and vulnerability reduction. *Glob Environ Change* 2013; **23:** 1819–29.

10 Bourque F, Cunsolo Willox A. Climate change: the next challenge for public mental health? *Int Rev Psychiatry* 2014; **26:** 415–22.